Using the Microfilm Scanner

The microfilm scanner can be used in two different ways:

- As a **reader-printer**, for viewing microfilms and microfiches on the scanner and printing pages/ images directly to the attached printer.
- As a **scanner**, used in conjunction with the attached PC, for saving pages/images projected on the scanner's screen.

Section A: Getting started

1) Switch on the Microfilm Scanner (Canon 350 II). This must always be switched on **before** the PC.

2) Switch on the PC and the printer (Canon Fileprint 470).

3) Log on to the PC. The username is **microfilm** and the password is **microfilm**.

4) Double-click on the CapturePerfect icon on the PC desktop. This is the software that you can use to scan images from the microfilm or microfiche that you are viewing.

Please note that the PC is not connected to the University network. This means that you can't access the Internet, e-mail, or your filespace.

Section B: Loading the microfilm or microfiche

You will need to obtain a zoom lens from a member of Library staff. Please ask at the Enquiry Point in the Reading Room between 09:00 and 17:00, Monday to Friday during term-time, and at the Reception Desk outside of these hours.

A 9.5-16x zoom lens is required for viewing 35mm film.
A 16-32x zoom lens is required for viewing fiche or 16mm film.

Staff will fit the lens to the scanner for you, and remove it when you have finished. **Please do not handle the lenses yourself**, as they are fragile and expensive to replace.

When following the instructions below for using the fiche carrier or the motorized roll carrier, it would be helpful to refer also to the Canon user instruction manual for the Roll/Fiche Carrier 200, as this has diagrams. The manual can be obtained from Library staff.

Using the fiche carrier

1) Hold the motorized roll carrier by the silver handle on the right hand side, and push it in until it stops. If the motorized roll carrier is not pushed all the way in, the fiche carrier will not operate.

2) Hold the fiche carrier by the silver handle and move it right, until it is in the centre.

3) Pull the fiche carrier towards you until the top glass plate opens.

4) Insert the fiche between the top and bottom glass plates. Align the left side of the fiche with the aligning mark on the carrier so that the header is towards you.

5) Holding the silver handle, push the fiche carrier in gently. The top glass plate closes automatically to secure the film in place.

6) Use the silver handle to move the fiche carrier forward, backward, left or right until the desired image appears on the screen.

Using the motorized roll carrier (for 35mm and 16mm film)

1) Use the silver handle to move the fiche carrier left until it reaches the stopper. If the fiche carrier is not moved left all the way to the stopper, the motorized roll carrier will not operate.

2) Hold the motorized roll carrier by the silver handle on the right hand side, and pull it out towards you until it stops.

3) Ensure that the Winding direction changing switch (on the left hand side of the carrier) is in the correct position, and place the film on the open-reel adapter.

4) There is a selector lever on the right hand side of the motorized roll carrier. Select the width of the film to be viewed (i.e. 16 or 35 mm).

5) Pull out the film and thread it under the guide roller and between the top and bottom glass plates.

6) Press the blue starter lever to wind the film onto the take-up reel, and continue pressing until the take-up reel stops.

7) Hold the motorized roll carrier by the silver handle and gently push it back in, until the image appears on the screen.

If the image is displayed as a mirror image, re-wind the film, alter the position of the Winding direction changing switch (which can be found on the left-hand side of the carrier), and re-position the film to reverse the winding direction of the roll.

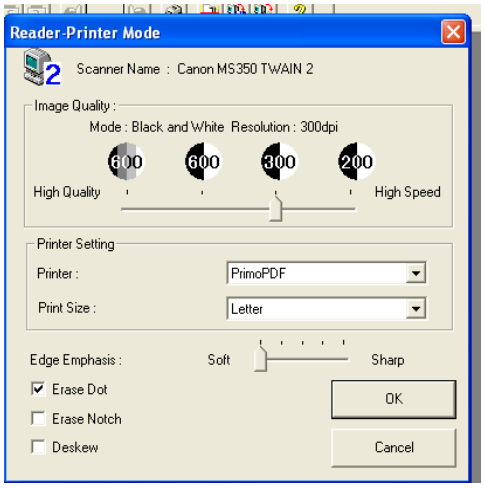
8) Use the control knob on the scanner keyboard to forward or rewind the film. To increase the film speed, turn the knob further in the corresponding direction. To stop feeding the film, return the knob to the centre position.

Section C: Using the scanner in Reader-printer mode

This is the mode to choose if you wish to view microfilms and microfiches on the scanner and print pages/images directly to the attached printer.

1) Open up the CapturePerfect software, as described in Section A.

2) Click on **File** from the menu bar and select **Setting Reader-Printer mode**. The following dialogue box will appear:



Here you can select the resolution of your scanned image, ranging from 200 dpi for the lowest quality and highest speed, to 600 dpi for the highest quality and slowest speed. 300 dpi is recommended as the best setting for a combination of image quality and speed that is suitable for most scanning. It is also possible to alter the softness/sharpness of the image, and to erase dots.

3) Click on **OK** when you have chosen the required settings.

4) Click on **File** from the menu bar and select **Reader-Printer mode**. From this point the settings and operation of the scanner must be performed through the scanner keyboard, or through the operation panel on the main scanner body. The CapturePerfect main screen will reside in the task tray of the PC (in the bottom right hand corner of the screen), and will appear as an icon showing a PC and the number 2.

5) Position the microfilm or fiche to display the page/image to be viewed and printed.

6) You may now wish to amend settings further, as described below, for the purposes of viewing and printing:

Adjusting the image size
a) Press the Image Adjust Select key on the right hand side of the scanner keyboard until the ZOOM lamp is illuminated.
b) Turn the control dial on the scanner keyboard down to enlarge the image, or up to reduce it.

Focusing the image
a) Press the Image Adjust Select key on the right hand side of the scanner keyboard until the FOCUS lamp is illuminated.
b) Turn the control dial on the scanner keyboard up or down to obtain proper focus.

Arbitrary rotation
a) Press the Image Adjust Select key on the right hand side of the scanner keyboard until the ROTATE lamp is illuminated.
b) Turn the control dial on the scanner keyboard down to rotate the image to the right, or up to rotate it to the left.

90 degree rotation
Press the rotation key, either left or right, on the scanner keyboard so that the image can be rotated 90 degrees in the direction shown by the arrow on the key.

There is also an **auto rotation** key that allows you to rotate the image 90 degrees for printing. To use this feature, press the key so that the lamp is illuminated. Please note that A4 and A3 paper will feed through the printer as portrait (A4R in tray 1 and A3 in the manual tray).

Selecting polarity
This setting allows you to select the film polarity (negative or positive), and can be performed on either the scanner keyboard or the operation panel on the main scanner body.
The negative setting (top) prints positive from negative film.
The positive setting (middle) prints positive from positive film.
The auto setting (bottom) automatically detects the type of film in use and prints a positive image.

Brightness adjustment
The brightness of the image during scanning can be adjusted automatically (AE) or manually, using either the scanner keyboard or the operation panel on the main scanner body. Moving the indicator to the right brightens the scanned image and moving it to the left darkens the scanned image.

For other functions (e.g. trimming, border removal, date stamping and entering notes) please see the Canon MS350 II user instruction manual, which can be obtained from Library staff.

Printing

To print out a copy of the page/image being viewed:

1) Select any further print settings that you require to control the quality of the printouts, such as **Picture mode** or **Sharpness Adjustment**. To obtain a higher quality printout when printing pictures, it is recommended that you select **Picture mode,** by pressing the Picture key on the scanner keyboard so that the lamp is illuminated.

2) On the scanner keyboard select whether you wish to print from the paper cassette (A4R) or the manual tray (to feed through A3 paper as portrait, or A4 as landscape). The top setting refers to the manual tray, and the middle setting refers to the A4R paper cassette. Press the key until the lamp is illuminated next to your chosen setting.

3) Set the number of prints that you want to make, using the + and – keys on either the scanner keyboard or the operation panel on the main scanner body. The number that you have set (1 to 99) will be shown on the illuminated display.

4) Press the green start button on the scanner keyboard or operation panel.

Printing costs 5p for an A4 printout and 10p for A3. Please pay for this at the Reception Desk at the end of your session, showing staff how many printouts you have made.

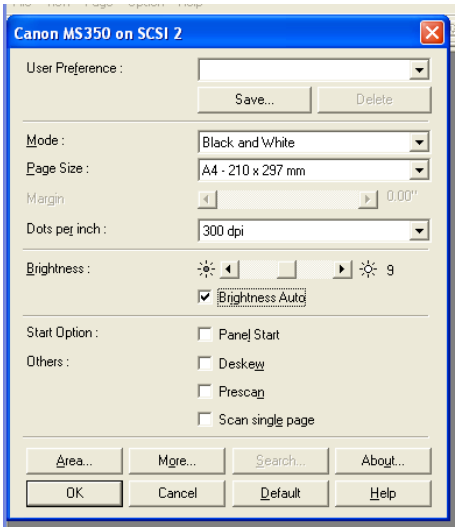
Section D: Using scanner mode

This is the mode to choose if you wish to save a copy of the pages/images being viewed using the attached PC. You will need a USB memory stick on which to store the images in order to take them away for later reading or manipulation.

1) Open up the CapturePerfect software, as described in Section A.

2) Position the microfilm or fiche to display the page/image to be scanned.

3) On the PC, click on **File** from the menu bar and select **Setting Scanner**. The following dialogue box will appear:

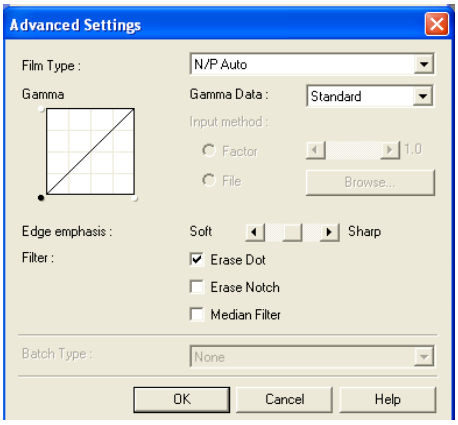


Here you can select the resolution of your scanned image, ranging from 200 dpi for the lowest quality and highest speed, to 600 dpi for the highest quality and slowest speed. 300 dpi is recommended as the best setting for a combination of image quality and speed that is suitable for most scanning.

You can also select the mode: Black and White is recommended for text documents, and 256-level Gray for pictures.

You can also adjust the brightness. It is recommended that the Brightness Auto option is left off if scanning an image that includes pictures and text.

Clicking on the **More** button will open up the following dialogue box:



Here you can select the film polarity (negative or positive). The N/P Auto option automatically detects the type of film in use. It is also possible to alter the softness/ sharpness of the image, and to erase dots.

4) Click on **OK** when you have chosen the required settings.

5) Click on **File** from the menu bar, and then on either **Scan to Page** or **Scan to batch**.

Choose **Scan to Page** if you wish to scan a single page/image.
Choose **Scan to batch** if you wish to scan multiple pages/images and save them as a single file.
Please note that if you select Scan to Page, but then proceed to scan more than a single page, only the page most recently scanned will be saved.

Scan to Page

a) To save your single scanned image, click on **File** from the menu bar, then on **Save As**.

b) Select the E: drive, which is the USB Memory drive, and give it a file name.

c) Select which file type you wish to save it as, e.g. PDF, BMP or TIFF (see notes below on file types).

d) Click on the **Save** button.

Scan to batch

a) The **Scan Batch to File Setting** dialogue box will open immediately.

b) Select the E: drive, which is the USB Memory drive, and give it a file name.

c) Select which file type you wish to save it as, e.g. PDF, BMP, TIFF or JPEG (see notes below on file types).

d) Ensure that the check box to the left of **Multi-page file** is ticked. There is also an option to **Save Rotated Image**, if you wish your scanned image to be saved at a 90 degree rotation to the image being displayed on the scanner.

e) Click on **Save**.

f) The **Start Scanning** dialogue box will appear. Click on **Start Scanning**.

g) Keep moving through the microfilm or fiche and clicking on the **Continue Scanning** button until you have scanned all of the pages/images that you require.

h) Click on **Stop Scanning**.

Please ignore the **Scan to Print** and **Scan to Mail** options in the software. The PC isn't connected to the University network, and therefore can't send information to networked printers or your email account. If you wish to print the image(s) that you are viewing on the attached printer, you will need to use the scanner in Reader-printer mode (see Section C of these user instructions).

Please do not save files on to the PC itself, as any filespace will be cleared on a regular basis.

File types

If you only wish to read the images/pages that you are saving, then save your files as **PDF**.

If you wish to manipulate them later, then you will need to save your files as **BMP**, **TIFF** or **JPEG**. These files can be opened in image editing software, such as Adobe Photoshop, Corel Paintshop Pro, or the freely-available Gimp. If you wish to incorporate an image into a Word document, then it is advisable to save the file as **BMP**.

OCR option

There is an option to save a PDF file with OCR, so that the text of the document is searchable within Adobe Acrobat Reader. To do this:

a) Click on **Option** from the menu bar and select **PDF File**.
b) Select a language from the drop-down list.
c) Ensure that the **Apply OCR** check box is ticked, and click on **OK**.

More information on how to use the scanning software can be obtained from the CapturePerfect help pages.

Section E: Shutting Down

When ending your session please rewind and carefully remove the microfilm that you have been using, and ask Library staff to remove the zoom lens. Please shut down the PC **before** switching off the Microfilm Scanner.